

CLAIM AMENDMENTS

1. (cancelled).
2. (cancelled).
3. (cancelled).
4. (cancelled).
5. (cancelled).
6. (cancelled).
7. (cancelled).

1           8. (previously presented) The system defined in claim 9  
2 wherein said output sides are connected to said pipe through a  
3 valve enabling draining of said pipe following a test.

1           9. (previously presented) A system for controlled  
2 application of fluid pressure to a load in the form of a pipe  
3 closed at its ends to pressure test the pipe, said system,  
4 comprising:

5           at least two pressure converters each having an output  
6 side connectable through respective check valves with a source of a  
7 pressurizing fluid and with said load, a drive side pressurizable

8 in opposite directions to draw said fluid into and discharge said  
9 fluid from a respective output side, and a connection between each  
10 pressure side and the respective output side whereby each pressure  
11 converter has a member displaceable by pressurization of the  
12 respective drive side;

13 a respective displacement measuring device cooperating  
14 with each of said members for measuring the displacement of each of  
15 said members;

16 a common control unit for controlling the pressurization  
17 of each of said drive sides so as to reduce an output pressure of a  
18 respective output side of one of said pressure converters as the  
19 respective member approaches a limiting position in a pressure  
20 stroke of said one of said pressure converters, and simultaneously  
21 increasing an output pressure of a respective output side of  
22 another of said pressure converters and effecting a displacement of  
23 the respective member of said other pressure converter by  
24 initiating a pressure stroke of said other pressure converters,  
25 the pressurization of said drive sides being controlled through  
26 respective valves and a common controller for said valves forming  
27 said control unit and receiving inputs from respective displacement  
28 measuring devices responding to the positions of said members, the

29 pressure strokes being repeated until a certain pressure is reached  
30 at said load; and  
31 proportional/integral regulator between said output sides  
32 and said pipe for delivering a signal to said common controller.

1 10. (previously presented) The system defined in claim  
2 9 wherein each of said pressure converters has at said drive side a  
3 respective double-acting cylinder and a piston, each of said output  
4 sides has a respective cylinder and piston and the respective  
5 member of each of said pressure converters connects the pistons to  
6 the cylinders thereof.

1 11. (previously presented) A system for controlled  
2 application of fluid pressure to a load in the form of a pipe  
3 closed at its ends to pressure test the pipe, said system,  
4 comprising:

5 at least two pressure converters each having an output  
6 side connectable through respective check valves with a source of a  
7 pressurizing fluid and with said load, a drive side pressurizable  
8 in opposite directions to draw said fluid into and discharge said  
9 fluid from a respective output side, and a connection between each

10 pressure side and the respective output side whereby each pressure  
11 converter has a member displaceable by pressurization of the  
12 respective drive side;

13 a respective displacement measuring device cooperating  
14 with each of said members for measuring the displacement of each of  
15 said members;

16 a common control unit for controlling the pressurization  
17 of each of said drive sides so as to reduce an output pressure of a  
18 respective output side of one of said pressure converters as the  
19 respective member approaches a limiting position in a pressure  
20 stroke of said one of said pressure converters, and simultaneously  
21 increasing an output pressure of a respective output side of  
22 another of said pressure converters and effecting a displacement of  
23 the respective member of said other pressure converter by  
24 initiating a pressure stroke of said other pressure converters,  
25 the pressurization of said drive sides being controlled through  
26 respective valves and a common controller for said valves forming  
27 said control unit and receiving inputs from respective displacement  
28 measuring devices responding to the positions of said members, the  
29 pressure strokes being repeated until a certain pressure is reached  
30 at said load; and

31           each of said pressure converters has at said drive side a  
32   respective double-acting cylinder and a piston, each of said output  
33   sides has a respective cylinder and piston and the respective  
34   member of each of said pressure converters connects the pistons to  
35   the cylinders thereof, each of said members being a rack and said  
36   displacement measuring devices including pinions engageable with  
37   said racks.

1           12. (original) The system defined in claim 11 wherein  
2   each of said double-acting cylinders is connected to two ports of a  
3   four-port, three position valve having two further ports connected  
4   to a hydraulic pressure source and drain respectively, each of said  
5   four-port, three-position valves having an electrical actuator  
6   operated by said common controller.